MULTIMEDIA UNIVERSITY

STUDENT ID NO

MULTIMEDIA UNIVERSITY

FINAL EXAMINATION

TRIMESTER 2, 2016/2017

MID 7133 – INSTRUCTIONAL SYSTEMS DESIGN

(All sections / Groups)

06 February 2017
02.30 p.m – 04.30 p.m
(2 Hours)

INSTRUCTION TO STUDENT

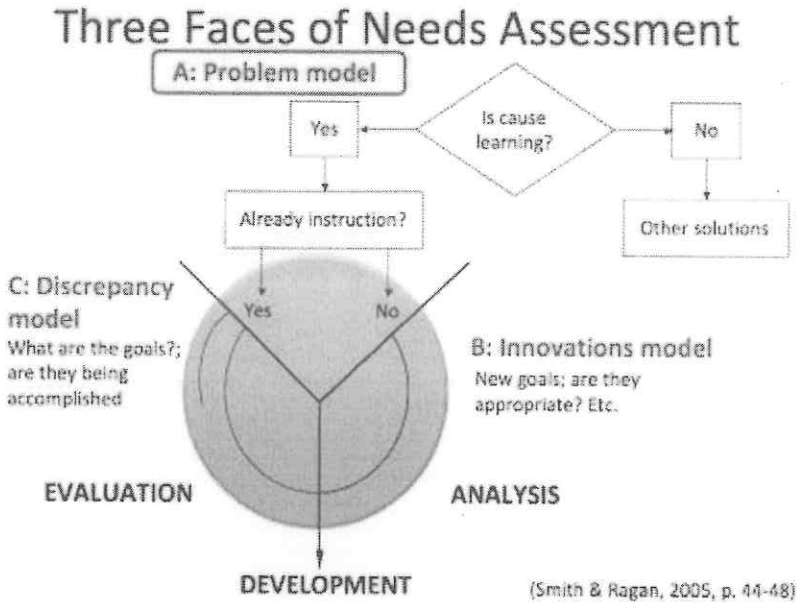
1. This Question paper consists of 9 pages with 6 Questions only.

2. Answer **FOUR** out of SIX questions. All questions carry equal marks and the distribution of the marks for each question is given .

3. Please print all your answers in the Answer Booklet provided.

Question 1

a) Describe one of the models below for needs assessment (8 marks)



b) **Based on the scenario below,**

i. Identify the gap in the learners' performance (2 marks)

ii. Create a fish bone diagram for the context given (4 marks)

iii. Create a flow-chart for the e-learning course with a goal and at least three measurable learning outcomes (6 marks)

Petrico is a leader in consulting services for petroleum products companies. Petrico has a dress code policy that applies to all employees. The dress code includes a section for employees who work in a Petrico office and a separate section for when employees meet with clients. Recently, the human resources team has had conversations with a number of employees (more than 20) due to inappropriate dress while at a Petrico offices. Furthermore, human resources has just completed an annual review of the dress code policy which included surveying their own clients as well as several other companies who do similar work. They have found that the dress code policy at Petrico is similar to those of other companies but clients are not satisfied with Petrico employee appearance. They have also completed an internal survey that indicated that 55% of the employee population is not aware of the Petrico location dress code policy.

HR, in consultation with their internal training department, has decided to use a training and communication approach to familiarize employees with the dress code policy placing emphasis on the policy for appropriate dress at Petrico locations:

1. Re-communicate the policy to all employees through an email from HR, and by posting the policy with an announcement on the employee communication network. It is expected that about 90% of employees will view the email and approximately 70% of employees will view the announcement on the communication network. The communications will both include a link to the policy and a Frequently Asked Questions (FAQs) document. Employees will be encouraged to speak with their manager for clarification. The communication will also reference upcoming

Continued...

training.

2. Roll out an interactive eLearning course that highlights the major components of the policy through scenarios applicable to different employee groups. The eLearning course will include a short assessment. The assessment will be designed to help employees review the policy and familiarize themselves with appropriate dress. The course will also include links to the policy and FAQs as well as an employee worksheet to act as a personal reference about the policy. All employees will be required to complete the training within three months of roll out. New employees will be required to take the training within their first three weeks of employment.

3. Managers and HR will collaborate on employee reviews over the next six months to evaluate employee adherence to the dress code policy. Employees who do not adhere to the policy will receive a verbal warning and will be required to read and sign off on the policy. Further infractions will result in a written warning. If an employee continues to dress inappropriately further discipline will be taken up to and including termination.

4. Employee performance and adherence to the dress code will continue to be monitored by HR. One year (12 months) after the eLearning course roll-out, HR will conduct another survey to determine if employee awareness of the policy has increased sufficiently (above 95%). To ensure continued diligence, HR will review and communicate annually about the policy.

Question 2

Based on the following context:

The use of information communication technology by Indigenous Australians is very limited, and Aboriginal Australians are a minority group in higher education. Increased support for Indigenous use of ICT is part of current equity and access provision in Australian universities. In 1998 Edith Cowan University in Western Australia successfully obtained funding to launch its pre-university bridging courses on the World Wide Web to cater for Indigenous students wishing to undertake a pre-tertiary course. The on-line learning environment and content were intended to enhance the participation of Indigenous learners in technology-based learning approaches, and to increase their academic success through increased proficiency and awareness of computer technology.

The course description is as follows:

Course Title: **Internet and the World Wide Web**

Course Rationale: **This course provides students with a basic introduction to the resources that are available on the Internet with an emphasis on using the World Wide Web to locate, transfer, and publish information. The course includes a survey of emerging technologies on the Internet.**

Instructional Goals and Purposes: **The purpose of this course to teach students to use and configure web browsers; use the Internet to locate, transfer, and publish information; create a basic HTML document; use e-mail services; and explain issues in choosing an Internet service provider.**

Learning Outcomes:

1. Describe the important features of the Web and Web browser software
2. Evaluate e-mail software and Web-based e-mail services
3. Use search engines and directories effectively
4. Find, evaluate, and use online information resources
5. Use online services to transfer and store data
6. Demonstrate the use of social media
7. Create HTML documents and enhance them with browser extensions.
8. List and describe security threats and countermeasures

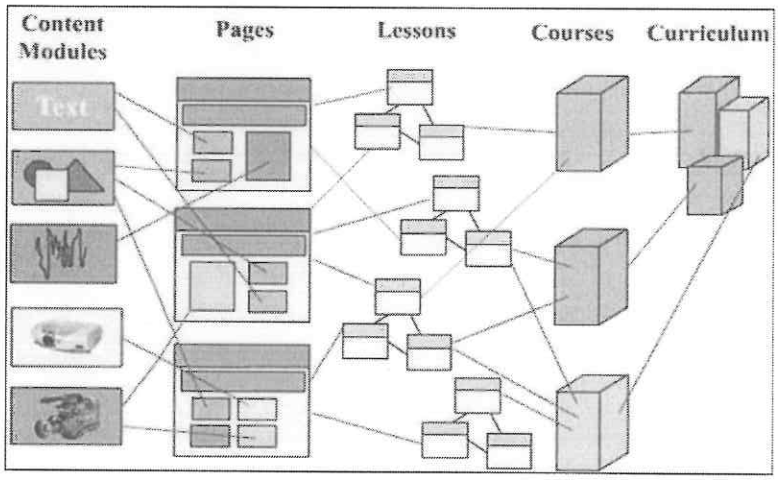
Continued...

a) Design an e-learning content using the Gagne Nine Events of Instructional strategy (10 marks).
b) Provide an example for each classification of content in the table below (10 marks).

Classification of Content	Example
Fact	
Concept	
Procedure	
Principle	
Process	

Question 3

a) Explain the reusability of a learning object according to the diagram below (3 marks).



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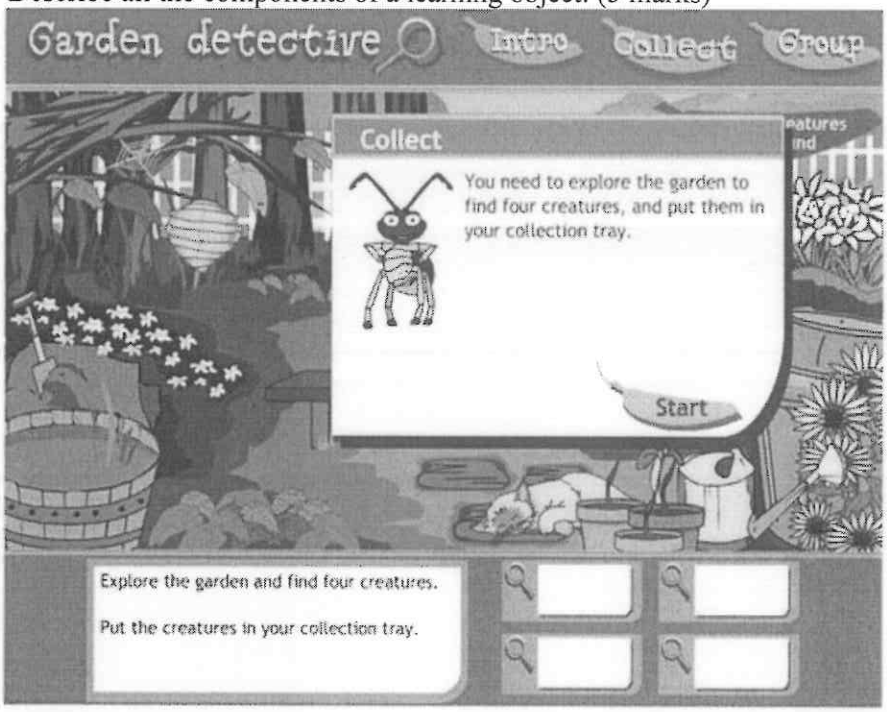
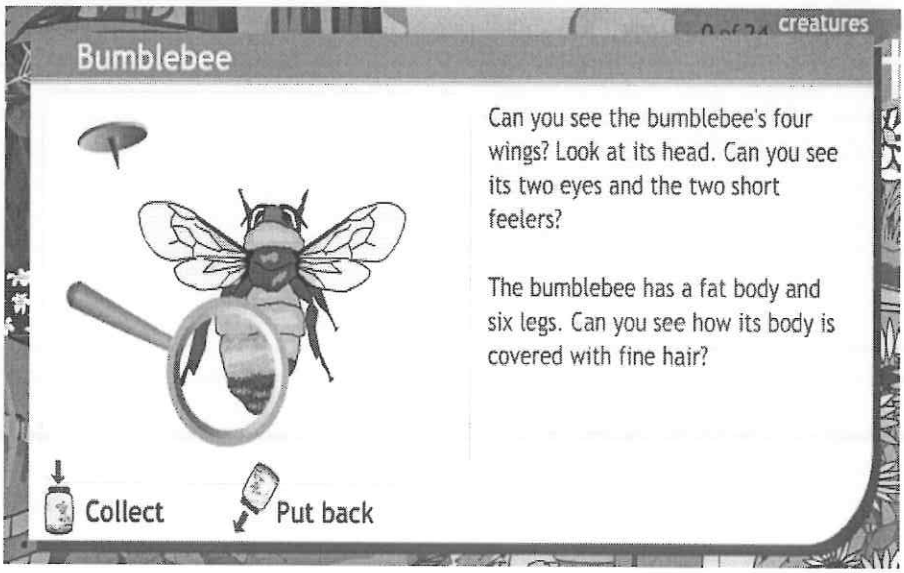
b) Two screenshot examples of the components of a learning object are given below. Describe all the components of a learning object. (5 marks)


Garden detective
Intro
Collect
Group
Collect
You need to explore the garden to find four creatures, and put them in your collection tray.
Start
Explore the garden and find four creatures.
Put the creatures in your collection tray.


creatures
Bumblebee
Can you see the bumblebee's four wings? Look at its head. Can you see its two eyes and the two short feelers?
The bumblebee has a fat body and six legs. Can you see how its body is covered with fine hair?
Collect
Put back

c) Create storyboards for the other three components (12 marks)

Continued…

Question 4

a) Discuss the advantages of the constructivist instructional strategy for e-learning delivery (5 marks)

b) Design a constructivist learning task and its process for the following topic (15 marks).

Introduction:

You have won a trip for you and your classmates to the 2016 Olympic Games in Rio de Janeiro, Brazil! However, you don't know much about this event despite the fact that it sounds exciting, so you have to conduct research about the event before your travel on the following topics:

1. History of the competition (when is celebrated and why? / medals / Olympic torch / legends / ...)
2. The city of Rio (where it is? / main features of the town...)
3. Sport facilities (stadiums / Olympic Village...)
4. Sports and Athletes (how many are there? / kinds of sports / maximum favorites to win...)
5. Countries (participants / Japan: number of athletes, medal options...etc.

Resources:

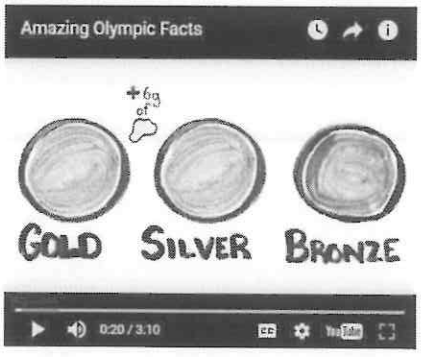
1. http://www.history.com/topics/olympic-games

This website describes the Olympic games history

2. http://www.topendsports.com/world/lists/greatest-all-time/olympics.htm

This website is about the greatest Olympic athletes

3. The video is about the Olympic medals



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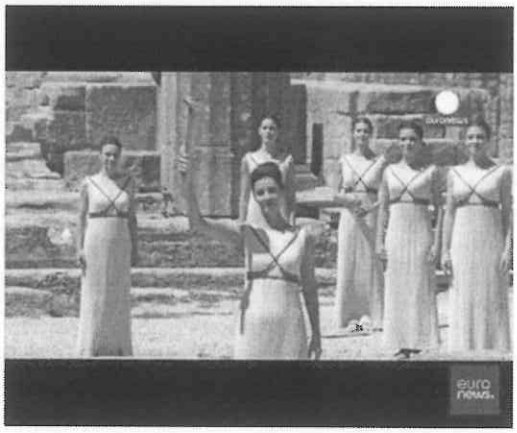
4. This video is about the Olympic torch



5. http://www.brasil2016.gov.br/en/olimpiadas/facilities/vila-olimpica

This website describes the Olympic village in Rio Janeiro – the facilities provided and events.

6. https://www.olympic.org/athletes

7. https://www.olympic.org/rio-2016

These websites showcase the participating athletes and countries.

8. https://www.riodejaneiro.com

This website is a city guide of Rio De Janeiro, Brazil.

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Question 5

Develop a storyboard for the following content to include (20 marks):

- the media elements used
- the interactivity in the screens
- the hyperlinks/hypertext (if appropriate), and
- Any needed directions for user

An example of a storyboard template

Screen (no. 1 of _____)	Graphics Instruction	Media/Programming

Content for storyboarding

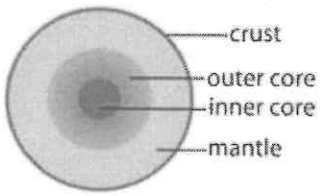
Objective

- **To recognize how volcanoes are formed**

Content

The Earth's Layers

The amazing planet we live on is made up of several layers.



Crust - **The top layer, which we know the most about because it's where we live, is called the crust. Some parts of the crust are covered by land (the continents, like North America and Africa) and some parts are covered with water (the oceans). The earth's crust is not all one piece. It is divided up into smaller sections called tectonic plates. These plates are huge slabs of rock that can move slightly and sometimes rub against each other, causing earthquakes and volcanoes. The crust layer is about 20 miles thick (it is not as thick under the oceans as under land).**

Continued...

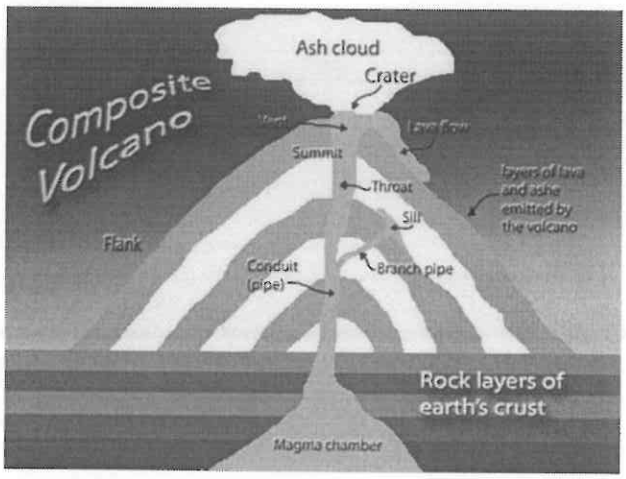
Mantle - **The layer under the crust is called the mantle. It is the middle layer and is very thick - in fact, it is about 1800 miles thick! This layer is made of rock that is very heavy - heavier than any type of rock on the crust of the earth. Sometimes parts of the mantle get hot enough to melt the rock so that it flows sort of like melted plastic.**

Core - **The core is the layer below the mantle, farthest down into the earth. There is an outer core and an inner core. The outer core is extremely hot and is made mostly of molten (or melted) iron, which is called magma. It is about 1300 miles thick. The inner core is at the very center of the earth, surrounded by the outer core. Scientists believe that the inner core is a solid ball made mostly of iron and is more than 750 miles thick!**

How Volcanoes Are Formed

A volcano is formed when there is a crack or hole in the crust, called a vent. The temperature in the deeper layers of the earth sometimes gets so hot that it melts rocks that are deep down in the earth, in the mantle and the core. Then, extremely high pressure from inside the earth builds up so much that it forces the melted rock up out of the earth through the vent, causing a volcano! Often times the vent is inside of a mountain, which means that when a volcano erupts, it shoots out of the top of the mountain. Sometimes the vent is in a flat area and the rock that erupts cools around the vent and the volcano forms its own mountain-like structure. There can even be vents in the floor of the ocean, so sometimes volcanoes can erupt underwater.

The melted rock that is pushed out of the earth is called magma. Once the magma reaches the surface of the earth and explodes out of the volcano, it is called lava. The lava flows very quickly and is very dangerous because it is burning hot! Dangerous gases, whole rocks, and ash can also shoot out of a volcano along with lava. The effects of a volcano on the land surrounding it can be very deadly. Plants and trees are often burned by the flowing hot lava or completely covered. However, the nutrients found in the lava and ash that a volcanic eruption spreads across the land actually work like a fertilizer that makes the soil a perfect place for new plants to grow!



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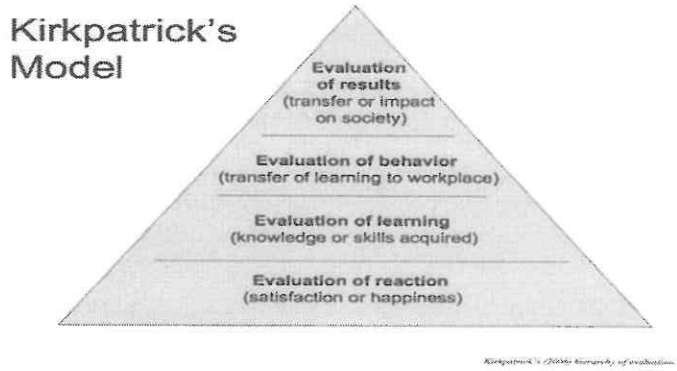
Question 6

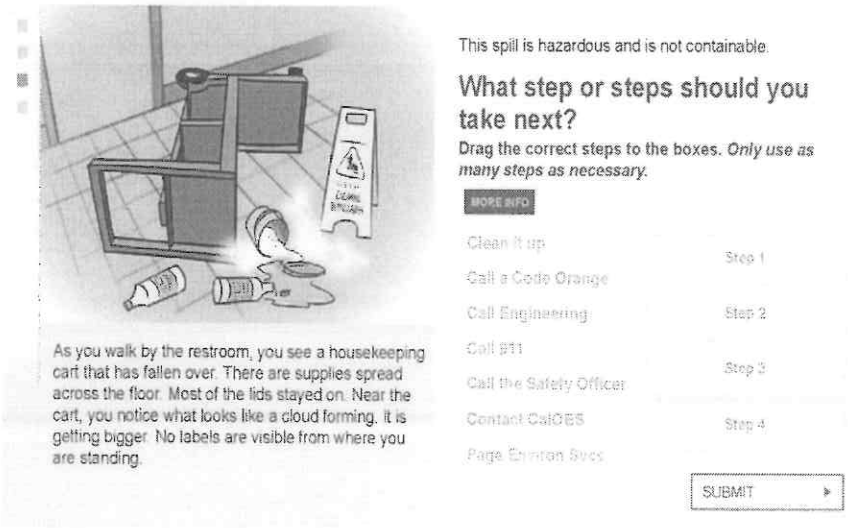
a) Compare and contrast the two types of evaluation in e-learning (4 marks)

b) Explain how the following evaluation model is used for e-learning purposes? (6 marks)


Kirkpatrick's Model
Evaluation of results (transfer or impact on society)
Evaluation of behavior (transfer of learning to workplace)
Evaluation of learning (knowledge or skills acquired)
Evaluation of reaction (satisfaction or happiness)

c) Explain **only two (2)** of the criteria for evaluating an e-learning content by relating to the screenshot of an e-learning content below. (10 marks).

i. Instructional design and pedagogical soundness
ii. Content quality
iii. Interactivity and navigation design
iv. Screen and interface design
v. Technical soundness


As you walk by the restroom, you see a housekeeping cart that has fallen over. There are supplies spread across the floor. Most of the lids stayed on. Near the cart, you notice what looks like a cloud forming. It is getting bigger. No labels are visible from where you are standing.
This spill is hazardous and is not containable.
What step or steps should you take next?
Drag the correct steps to the boxes. Only use as many steps as necessary.
MORE INFO
Clean it up
Call a Code Orange
Call Engineering
Call 911
Call the Safety Officer
Contact CalOES
Page Environ Svcs
Step 1
Step 2
Step 3
Step 4
SUBMIT

End of Paper